

***DOE/ID-10989
Revision 0
March 2006***

***Site PBF-34 Track 1 Decision Documentation
Package, OU 10-08***

**DECISION DOCUMENTATION PACKAGE
COVER SHEET**

Prepared in accordance with

**TRACK 1 SITES:
GUIDANCE FOR ASSESSING
LOW PROBABILITY HAZARD SITES
AT THE INEEL**

Site Description: Abandoned Debris Located Near the MWSF

Site ID: PBF-34

Operable Unit: 10-08

Waste Area Group: 10

I. SUMMARY – Physical description of the site:

Site PBF-34 consists of a small volume of asbestos-containing concrete (transite) pipe pieces, laying on the ground surface, about 150 ft west of the Mixed Waste Storage Facility (MWSF) at the Power burst Facility (PBF) area. The MWSF was originally the Special Power Excursion Reactor Test No. IV (SPERT-IV) facility.

In accordance with Management Control Procedure-3448, Reporting or Disturbance of Suspected Inactive Waste Sites, a new site identification form was completed for this site. As part of the process, a site description was written, photographs were collected, and global positioning system (GPS) coordinates for the site were surveyed.

The GPS coordinate system is NAD 27, Idaho East Zone, State Plane Coordinates. The new site identification process also included a search and review of existing historical documentation.

The pipe material was determined by an EPA certified asbestos inspector at the INL to be nonfriable. This determination was made in accordance with 40 CFR 61.141 which states that if the material "when dry cannot be crumbled, pulverized or reduced to powder by hand pressure" may be classified as Category II nonfriable.

A radiological survey was performed on the asbestos and all the direct beta/gamma scans were <100 counts per minute (cpm) above background and all alpha scans were equal to background.

DECISION RECOMMENDATION

II. SUMMARY - Qualitative Assessment of Risk:

The source of the asbestos-containing concrete pipe scrap is unknown, but personnel at the SPERT-IV facility could have abandoned the pipe pieces during its construction or operation. Nonfriable asbestos-containing concrete pipe is present and no other potential contaminants are assumed to be present.

Asbestos is a generic denomination for a group of natural fibrous silicate minerals. Asbestos can separate into strong, very fine fibers that can be 1,200 times thinner than a human hair, can become airborne, and can be breathed into the lungs. However, the asbestos at this site is nonfriable. That is, it will neither separate nor become airborne.

No exposure pathways exist. Because the site is relatively remote from people and the asbestos is nonfriable, the overall qualitative risk is considered low, possibly approaching zero.

The reliability of information provided in this report is high. Interviews were conducted with Environmental Management Environment Safety and Health (EM ES&H) personnel and the Industrial Hygienist and Cultural Resources personnel who were present for the site investigations.

III. SUMMARY - Consequences of Error:

False negative error:

If the true condition is that the site's risk is unacceptable, but the data lead the decision makers to decide that the site's risk is acceptable, then the data have lead to an erroneous decision of no remedial action, contributing to increased risk to human health and environment.

False positive error:

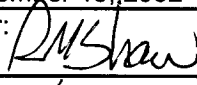

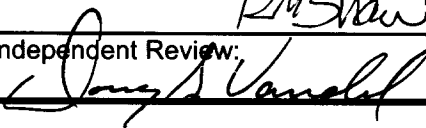
If the true condition is that the site's risk is acceptable, but the data lead the decision makers to decide that the site's risk is unacceptable, then the data have lead to an erroneous decision that will be costly in terms of unnecessary cleanup.

IV. SUMMARY - Other Decision Drivers:

The asbestos at this site does not represent a risk to human health. It is unlikely that it will become a risk in the future.

Recommended Action:

No action is recommended.

Signatures:	# Pages: 17	Date: September 15, 2002
Prepared By: Thomas Haney	DOE WAG Manager: 	
Approved By: 	Independent Review: 	

Determination

The U.S Department of Energy, U.S Environmental Protection Agency Region 10, and Idaho Department of Environmental Quality have completed the review of the referenced information for site PBF-34 in Operable Unit 10-08 as it pertains to the INEEL Federal Facility Agreement and Consent Order of 1991. Based on this review, the Parties have determined that no action is required.

Brief summary of the basis for the recommendation:

See Decision Statements on pgs 5, 6, and 7

References:

DOE Project Manager	<u>NA</u>	<u> </u> Date
EPA Project Manager	<u>NA</u>	<u> </u> Date
IDEQ Project Manager	<u>NA</u>	<u> </u> Date

DECISION STATEMENT
(DOE RPM)

Date Received:

Disposition:

DOE concurs that site PBF-34 should be classified as a
No Action site. However, DOE also concurs that the
asbestos should be removed to eliminate any potential
hazard.

Date: June 8, 2006

Name: Nolan R. Jensen

Pages:

Signature:

DECISION STATEMENT
(EPA RPM)

site PBF-34

Date Received:

Disposition:

EPA concurs that this site poses no risk to human health & the environment & should be classified as a no action site.

Date: 9-23-04
Name: Dennis Faulk

Pages: 4
Signature: [Signature]

DECISION STATEMENT
(IDeq RPM)

Date Received: September 23, 2004

Disposition:

Site PBF-34 Track 1 Decision Documentation Package, OU 10-08

Disposition:

The site consists of a small volume of asbestos containing concrete pipe pieces on the ground surface located about 150 feet west of the Mixed Waste Storage Facility in the PBF area. The asbestos reinforced Portland concrete pipe was tested to determine whether the pipe is friable; the pipe was determined to be friable. There is no evidence of other contamination at this site and the direct beta/gamma scans were <100 counts per minute and all alpha scans were equal to background.

The asbestos reinforced concrete pipe at PBF-33 was determined to be friable and is probably due to weathering. It is reasonable to assume this pipe also will weather and will become friable over time. The State believes the asbestos reinforced pipe should be removed from the site and disposed at an appropriate onsite landfill. This action can proceed without initiating a Track 2 investigation.

Date: September 28, 2004

Name: Daryl E. Koch

Pages:

Signature:

Daryl E. Koch

PROCESS/WASTE WORKSHEET PROCESS: Abandoned Debris Located Near the MWSE SITE ID: PBF-34 WASTE: Industrial		
Col 1 Processes Associated With This Site	Col 2 Waste Description & Handling Procedures	Col 3 Description & Location of any Artifacts/Structures/Disposal Areas Associated with this Waste or Process
Unknown.	<p>The asbestos-containing concrete pipe scraps were likely discarded during either SPERT-IV construction or the years of SPERT-IV operation between 1962 and 1970.</p> <p>Field surveys in 2001 revealed physical evidence of asbestos-reinforced concrete piping.</p>	<p>Artifacts: Asbestos-containing concrete pipe scraps</p> <p>Location: On the ground surface approximately 150 ft west of the MWSF.</p> <p>Description: The asbestos-reinforced concrete piping was determined to be nonfriable by an INEEL IH.</p>

WASTE: (Col 2) Industrial

Question 1. What are the waste generation processes, locations, and dates of operation associated with this site?

Block 1. Answer:

Site PBF-34 consists of a small volume of asbestos-containing concrete piping pieces that were shown to be nonfriable.

Block 2. How reliable are the information sources? X High _Med _Low (check one)
Explain the reasoning behind this evaluation.

An INEEL industrial hygienist determined that the asbestos is nonfriable.

Block 3. Has this INFORMATION been confirmed? X Yes _No (check one)
If so, describe the confirmation.

The IH report shows that the asbestos is nonfriable. Site visits and photographs verify that a small volume of asbestos-containing concrete pipe scraps are present.

Block 4. Sources of information [check appropriate box(es) & source number from reference list].

No available information	<input type="checkbox"/>	Analytical data	<input type="checkbox"/>
Anecdotal	<input checked="" type="checkbox"/> 2-7	Documentation about data	<input type="checkbox"/>
Historical process data	<input type="checkbox"/>	Disposal data	<input type="checkbox"/>
Current process data	<input type="checkbox"/>	Q.A. data	<input type="checkbox"/>
Photographs	<input checked="" type="checkbox"/> 11	Safety analysis report	<input type="checkbox"/>
Engineering/site drawings	<input type="checkbox"/>	D&D report	<input type="checkbox"/>
Unusual Occurrence Report	<input type="checkbox"/>	Initial assessment	<input type="checkbox"/>
Summary documents	<input type="checkbox"/>	Well data	<input type="checkbox"/>
Facility SOPs	<input type="checkbox"/>	Construction data	<input type="checkbox"/>
OTHER	<input checked="" type="checkbox"/> 7		

Question 2. What are the disposal processes, locations, and dates of operation associated with this site? How was the waste disposed?

Block 1. Answer:

The disposal processes are unknown. It is assumed that the asbestos-containing concrete pipe scrap was disposed at this location during either SPERT-IV construction or SPERT-IV operations between 1962 and 1970.

Block 2. How reliable are the information sources? _ High _Med X Low (check one)
Explain the reasoning behind this evaluation.

The disposal process is unknown.

Block 3. Has this INFORMATION been confirmed? _Yes XNo (check one)
If so, describe the confirmation.

The only information that is confirmed is that asbestos-containing concrete pipe pieces are present and that the asbestos is nonfriable.

Block 4. Sources of information [check appropriate box(es) & source number from reference list].

No available information	<input type="checkbox"/>	Analytical data	<input type="checkbox"/>
Anecdotal	<input checked="" type="checkbox"/> 2-7	Documentation about data	<input type="checkbox"/>
Historical process data	<input type="checkbox"/>	Disposal data	<input type="checkbox"/>
Current process data	<input type="checkbox"/>	Q.A. data	<input type="checkbox"/>
Photographs	<input checked="" type="checkbox"/> 11	Safety analysis report	<input type="checkbox"/>
Engineering/site drawings	<input type="checkbox"/>	D&D report	<input type="checkbox"/>
Unusual Occurrence Report	<input type="checkbox"/>	Initial assessment	<input type="checkbox"/>
Summary documents	<input type="checkbox"/>	Well data	<input type="checkbox"/>
Facility SOPs	<input type="checkbox"/>	Construction data	<input type="checkbox"/>
OTHER	<input checked="" type="checkbox"/> 7		

Question 3. Is there evidence that a source exists at this site? If so, list the sources and describe the evidence.

Block 1. Answer:

There is no evidence that a source exists at this site.

Asbestos-containing concrete pipe pieces are present.

Block 2. How reliable are the information sources? X High _Med _Low (check one)
Explain the reasoning behind this evaluation.

The Industrial Hygienist confirmed that the material contained nonfriable asbestos.

Block 3. Has this information been confirmed? X Yes _No (check one)
If so, describe the confirmation.

Memos from personnel involved in the process are attached. A memo from the Industrial Hygienist confirmed the presence of nonfriable asbestos-containing material.

Block 4. Sources of information [check appropriate box(es) & source number from reference list].

No available information	<input type="checkbox"/>	Analytical data	<input type="checkbox"/>
Anecdotal	<input checked="" type="checkbox"/> 2-7	Documentation about data	<input type="checkbox"/>
Historical process data	<input type="checkbox"/>	Disposal data	<input type="checkbox"/>
Current process data	<input type="checkbox"/>	Q.A. data	<input type="checkbox"/>
Photographs	<input checked="" type="checkbox"/> 11	Safety analysis report	<input type="checkbox"/>
Engineering/site drawings	<input type="checkbox"/>	D&D report	<input type="checkbox"/>
Unusual Occurrence Report	<input type="checkbox"/>	Initial assessment	<input type="checkbox"/>
Summary documents	<input type="checkbox"/>	Well data	<input type="checkbox"/>
Facility SOPs	<input type="checkbox"/>	Construction data	<input type="checkbox"/>
OTHER	<input checked="" type="checkbox"/> 7		

Question 4. Is there empirical, circumstantial, or other evidence of migration? If so, what is it?

Block 1. Answer:

There is no evidence of migration at this site and the asbestos is nonfriable. However, the ground surface appeared to have been disturbed and some nonfriable asbestos is probably buried.

Block 2. How reliable are the information sources? X High _Med _Low (check one)

Explain the reasoning behind this evaluation.

The asbestos is nonfriable.

Block 3. Has this information been confirmed? X Yes _No (check one)

If so, describe the confirmation.

The asbestos is nonfriable.

Block 4. Sources of information [check appropriate box(es) & source number from reference list].

No available information	<input type="checkbox"/>	Analytical data	<input type="checkbox"/>
Anecdotal	<input checked="" type="checkbox"/> 2-7	Documentation about data	<input type="checkbox"/>
Historical process data	<input type="checkbox"/>	Disposal data	<input type="checkbox"/>
Current process data	<input type="checkbox"/>	Q.A. data	<input type="checkbox"/>
Photographs	<input checked="" type="checkbox"/> 11	Safety analysis report	<input type="checkbox"/>
Engineering/site drawings	<input type="checkbox"/>	D&D report	<input type="checkbox"/>
Unusual Occurrence Report	<input type="checkbox"/>	Initial assessment	<input type="checkbox"/>
Summary documents	<input type="checkbox"/>	Well data	<input type="checkbox"/>
Facility SOPs	<input type="checkbox"/>	Construction data	<input type="checkbox"/>
OTHER	<input checked="" type="checkbox"/> 7		

Question 5. Does site operating or disposal historical information allow estimation of the pattern of potential contamination? If the pattern is expected to be a scattering of hot spots, what is the expected minimum size of a significant hot spot?

Block 1. Answer:

There is no expected pattern of contamination from asbestos because it is nonfriable.

Block 2. How reliable are the information sources? High ☒ Med ☐ Low (check one) Explain the reasoning behind this evaluation.

Photographs indicate that the soil is not stained or discolored and vegetation near the debris is well established.

Block 3. Has this information been confirmed? Yes ☐ No (check one)
If so, describe the confirmation.

Site investigation documentation, photographs, and an IH determination of the asbestos provided information for this estimate.

Block 4. Sources of information [check appropriate box(es) & source number from reference list].

No available information	<input type="checkbox"/>	Analytical data	<input type="checkbox"/>
Anecdotal	<input checked="" type="checkbox"/> 2-7	Documentation about data	<input type="checkbox"/>
Historical process data	<input type="checkbox"/>	Disposal data	<input type="checkbox"/>
Current process data	<input type="checkbox"/>	Q.A. data	<input type="checkbox"/>
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Unusual Occurrence Report	<input type="checkbox"/>	Initial assessment	<input type="checkbox"/>
Summary documents	<input type="checkbox"/>	Well data	<input type="checkbox"/>
Facility SOPs	<input type="checkbox"/>	Construction data	<input type="checkbox"/>
OTHER	<input checked="" type="checkbox"/> 7		

Question 6. Estimate the length, width, and depth of the contaminated region. What is the known or estimated volume of the source? If this is an estimated volume, explain carefully how the estimate was derived.

Block 1. Answer:

Site investigations and photographs indicate that the debris is scattered across an area approximately 10 X 10 feet.

There does not appear to be a contaminated region to estimate. A small volume of nonfriable asbestos-containing concrete pipe scrap is present on the ground.

Block 2. How reliable are the information sources? X High Med Low (check one)
Explain the reasoning behind this evaluation.

The asbestos is nonfriable and it is present in small quantities.

Block 3. Has this INFORMATION been confirmed? X Yes No (check one)
If so, describe the confirmation.

Photographs confirm the presence of the asbestos pieces and the IH report showed it was nonfriable.

Block 4. Sources of information [check appropriate box(es) & source number from reference list].

No available information	<input type="checkbox"/>	Analytical data	<input type="checkbox"/>
Anecdotal	<input checked="" type="checkbox"/> 2-7	Documentation about data	<input type="checkbox"/>
Historical process data	<input type="checkbox"/>	Disposal data	<input type="checkbox"/>
Current process data	<input type="checkbox"/>	Q.A. data	<input type="checkbox"/>
Photographs	<input checked="" type="checkbox"/> 11	Safety analysis report	<input type="checkbox"/>
Engineering/site drawings	<input type="checkbox"/>	D&D report	<input type="checkbox"/>
Unusual Occurrence Report	<input type="checkbox"/>	Initial assessment	<input type="checkbox"/>
Summary documents	<input type="checkbox"/>	Well data	<input type="checkbox"/>
Facility SOPs	<input type="checkbox"/>	Construction data	<input type="checkbox"/>
OTHER	<input checked="" type="checkbox"/> 7		

Question 7. What is the known or estimated quantity of hazardous substance/constituent at this source? If the quantity is an estimate, explain carefully how the estimate was derived.

Block 1. Answer:

The estimated quantity of hazardous substances/constituents at this site is near zero because the asbestos-containing concrete pipe scrap is the only material present.

Block 2. How reliable are the information sources? ☒_High ☐_Med ☐_Low (check one)

Explain the reasoning behind this evaluation.

The estimate was arrived at visually. The small pieces of asbestos-containing concrete pipe pieces are the only material present.

Block 3. Has this INFORMATION been confirmed? ☒_Yes ☐_No (check one)

If so, describe the confirmation.

The volume of asbestos is small and it is nonfriable.

Block 4. Sources of information [check appropriate box(es) & source number from reference list].

No available information	<input type="checkbox"/>	Analytical data	<input type="checkbox"/>
Anecdotal	<input checked="" type="checkbox"/> 2-7	Documentation about data	<input type="checkbox"/>
Historical process data	<input type="checkbox"/>	Disposal data	<input type="checkbox"/>
Current process data	<input type="checkbox"/>	QA data	<input type="checkbox"/>
Photographs	<input checked="" type="checkbox"/> 11	Safety analysis report	<input type="checkbox"/>
Engineering/site drawings	<input type="checkbox"/>	D&D report	<input type="checkbox"/>
Unusual Occurrence Report	<input type="checkbox"/>	Initial assessment	<input type="checkbox"/>
Summary documents	<input type="checkbox"/>	Well data	<input type="checkbox"/>
Facility SOPs	<input type="checkbox"/>	Construction data	<input type="checkbox"/>
OTHER	<input checked="" type="checkbox"/> 7		

Question 8. Is there evidence that this hazardous substance/constituent is present at the source as it exists today? If so, describe the evidence.

Block 1. Answer:

There is no evidence that a hazardous substance or constituent is present at this site.

Block 2. How reliable are the information sources? _High ☒ Med _Low (check one)
Explain the reasoning behind this evaluation.

This evaluation is based on site visitations, photographs of the site, and IH reports.

Block 3. Has this INFORMATION been confirmed? X _Yes _No (check one)
If so, describe the confirmation.

Site visits confirm that the small volume of piping pieces are the only materials present.

Block 4. Sources of information [check appropriate box(es) & source number from reference list].

No available information	<input type="checkbox"/>	Analytical data	<input type="checkbox"/>
Anecdotal	<input checked="" type="checkbox"/> 2-7	Documentation about data	<input type="checkbox"/>
Historical process data	<input type="checkbox"/>	Disposal data	<input type="checkbox"/>
Current process data	<input type="checkbox"/>	Q.A. data	<input type="checkbox"/>
Photographs	<input checked="" type="checkbox"/> 11	Safety analysis report	<input type="checkbox"/>
Engineering/site drawings	<input type="checkbox"/>	D&D report	<input type="checkbox"/>
Unusual Occurrence Report	<input type="checkbox"/>	Initial assessment	<input type="checkbox"/>
Summary documents	<input type="checkbox"/>	Well data	<input type="checkbox"/>
Facility SOPs	<input type="checkbox"/>	Construction data	<input type="checkbox"/>
OTHER	<input checked="" type="checkbox"/> 7		

REFERENCES

1. DOE, 1992, Track 1 Sites: Guidance for Assessing Low Probability Sites at the INEL, DOE/ID-10390 (92), Revision 1, U.S. Department of Energy, Idaho Falls, Idaho, July.
2. Memorandum, Doug Preussner to Timothy Carlson, 11/13/2000
3. Fact Sheet, Nicole Hernandez to Distribution. Discusses two sites (PBF-33 and PBF-34).
4. Memorandum, Dean Roberts to Robert Akins, 11/20/2000.
5. Memorandum, Dean Roberts to Nicole Hernandez, 11/15/2000
6. Memorandum, Katherine Davis to Frank Webber, 11/16/2000
7. Memorandum, Dan Mahnami to Robert Akins, 11/27/2000
8. Figure titled: Abandoned Debris Located Approx. 150 ft. West of the MWSF
9. Memorandum, Dean Roberts to Robert Akins, 11/13/2000
10. Memorandum, Dean Roberts to Robert Akins, 11/14/2000
11. Site photographs.

Attachment For Site PBF-34

